

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-38 (Canceled).

Claim 39 (New): An optical deflection matrix comprising:

at least two optical deflection modules each configured to provide:

from an incoming light beam having a given direction of propagation an outgoing light beam having a direction of propagation taken in a first set of potential directions, or

from an incoming light beam having a direction of propagation taken in a second set of potential directions an outgoing light beam having a given direction of propagation,

wherein each optical deflection module comprises a single deflection element of the incoming light beam configured to assume plural potential positions that are in relation to the potential directions of the first set or of the second set and two fixed return elements positioned on either side of the deflection element, a main potential position of the deflection element leading to a principal direction of the first set or of the second set, the principal direction being colinear with the given direction of propagation of the incoming light beam or of the outgoing light beam, the principal directions of the optical deflection modules being located in a same plane.

Claim 40 (New): The optical deflection matrix as claimed in claim 39, wherein the given direction is a fixed direction or is taken from among plural potential directions.

Claim 41 (New): The deflection matrix as claimed in claim 39, wherein the first or the second set of potential directions comprises discrete predetermined directions.

Claim 42 (New): The optical deflection matrix as claimed in claim 39, wherein the deflection element of at least one module includes a mirror.

Claim 43 (New): The optical deflection matrix as claimed in claim 39, wherein at least one potential position of the deflection element of at least one module is a mechanically predetermined discrete position.

Claim 44 (New): The deflection matrix as claimed in claim 43, wherein an abutment defines the at least one mechanically predetermined position of the deflection element of a module by stopping the deflection element

Claim 45 (New): The deflection matrix as claimed in claim 44, wherein the abutment is a double abutment comprising a tab configured to assume two distinct positions, the tab being deflected in one of the two distinct positions.

Claim 46 (New): The deflection matrix as claimed in claim 44, wherein a tab is integral with the deflection element, the tab configured to assume two distinct positions in support on the abutment, the tab being deflected in one of the two distinct positions.

Claim 47 (New): The deflection matrix as claimed in claim 39, wherein the main potential position of the deflection element is a position in which the deflection element is at rest.

Claim 48 (New): The deflection matrix as claimed in claim 39, wherein the deflection element of a module is configured to move in rotation about an axis perpendicular to at least one of the potential directions.

Claim 49 (New): The deflection matrix as claimed in claim 39, wherein the deflection element of a module is configured to move in rotation about an axis contained in the plane formed by the given direction and the main potential direction.

Claim 50 (New): The deflection matrix as claimed in claim 39, wherein the deflection element of a module comprises at least two reflective faces positioned in different planes and configured to move in translation so as to generate a rotation of the planes according to an axis formed by the intersection of the planes.

Claim 51 (New): The optical deflection matrix as claimed in claim 39, wherein the deflection element of a module comprises a link arm that connects the deflection element to a fixed part.

Claim 52 (New): The optical deflection matrix as claimed in claim 39, wherein the deflection element of at least one module is on a mobile base.

Claim 53 (New): The optical deflection matrix as claimed in claim 52, wherein the mobile base is integral with a link arm that connects the mobile base to a fixed part.

Claim 54 (New): The optical deflection matrix as claimed in claim 39, further comprising means for actuating the deflection element of a module of electrostatic type comprising at least one pair of electrodes, or at least one pair of electrodes in interdigitated combs.

Claim 55 (New): The optical deflection matrix as claimed in claim 39, further comprising conduits for guiding the incoming and outgoing light beams.

Claim 56 (New): The optical deflection matrix as claimed in claim 39, at least partially made by techniques used in microelectronics.

Claim 57 (New): The optical deflection matrix as claimed in claim 39, at least partially made by molding techniques.

Claim 58 (New): The optical deflection matrix as claimed in claim 39, at least partially made by transfer techniques.

Claim 59 (New): The optical deflection matrix as claimed in claim 39, wherein the two return elements of a module are symmetrical relative to a plane perpendicular to the main direction of potential propagation.

Claim 60 (New): The optical deflection matrix as claimed in claim 39, wherein the modules are placed in the same plane.

Claim 61 (New): The optical deflection matrix as claimed in claim 39, wherein each deflection element of a module includes a deflection plane, the deflection planes of the deflection elements in their main position being parallel or coincident.

Claim 62 (New): The optical deflection matrix as claimed in claim 39, wherein the optical deflection modules are positioned in at least one line and/or at least one column.

Claim 63 (New): The optical deflection matrix as claimed in claim 62, wherein two successive optical deflection modules in a line are separated by an optical conjugation element.

Claim 64 (New): The optical deflection matrix as claimed in claim 63, further comprising, in the same line, optical conjugation elements, the optical deflection modules comprising two return elements, and the optical conjugation elements having colinear optical axes.

Claim 65 (New): The optical deflection matrix as claimed in claim 39, comprising plural optical deflection modules in a column, the light beams having each a fixed direction of propagation, and the directions of propagation are in parallel.

Claim 66 (New): The optical deflection matrix as claimed in claim 39, comprising plural columns, the optical conjugation elements separating two optical deflection modules belonging to successive columns combined in a small bar.

Claim 67 (New): The optical deflection matrix as claimed in claim 39, wherein the return elements of the deflection modules are grouped on a same substrate.

Claim 68 (New): The optical deflection matrix as claimed in claim 67, wherein the substrate includes at least one compartment for an optical conjugation element.

Claim 69 (New): The optical deflection matrix as claimed in claim 67, wherein the deflection elements of the modules are grouped on the substrate.

Claim 70 (New): The optical deflection matrix as claimed in claim 67, wherein in at least one module, the deflection element is placed opposite to the return elements.

Claim 71 (New): The optical deflection matrix as claimed in claim 67, wherein at least one part of the deflection modules is grouped on a common substrate, the common substrate comprising means for supporting remainder of the modules and at least one compartment for one or more optical conjugation elements.

Claim 72 (New): A routing device configured to couple each of a plurality of optical input channels with any one of a plurality of optical output channels conveying light beams, comprising:

an optical input deflection matrix as claimed in claim 39, connected to the optical input channels, an optical output deflection matrix as claimed in claim 39, connected to the optical output channels, and a link module between the two input and output matrices.

Claim 73 (New): The routing device as claimed in claim 72, further comprising, upstream from the optical input deflection matrix, a shaping module of light beams conveyed by the input channels.

Claim 74 (New): The routing device as claimed in claim 72, further comprising, downstream from the optical output deflection matrix, a module for shaping the light beams to be conveyed by the output channels.

Claim 75 (New): The routing device as claimed in claim 72, wherein the optical input channels and the optical output channels are parallel to one another.

Claim 76 (New): The routing device as claimed in claim 72, wherein at least one return device is placed between the optical input deflection matrix and the link module and/or between the link module and the optical output deflection matrix.